

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/ /03852

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 F21S8/00 F21V3/04

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F21S F21V

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 335 421 A (MODIA JOSEPH W ET AL) 15 June 1982 (1982-06-15) column 3, line 29 - line 68 column 4, line 13 - line 35 claims 12,14,16,20	1-3,17
X	GB 2 358 513 A (INDIGITALE LTD) 25 July 2001 (2001-07-25) page 6, line 5 - line 27 page 7, line 16 - page 8, line 18 claims 1,6-8,10,18,19 figures 1-5	1-3,17
A		5,6,9, 15,16

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
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- \*P\* document published prior to the international filing date but later than the priority date claimed

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- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the international search

5 November 2003

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12/11/2003

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 267 489 A (MOROHASHI HISAO) 12 May 1981 (1981-05-12) column 2, line 48 -column 3, line 27 column 5, line 42 - line 48 column 7, line 44 - line 62 figures 1,2A,2B,2C,3,9A ----	1-3,17
A	US 5 839 823 A (KUPER JERRY WAYNE ET AL) 24 November 1998 (1998-11-24) column 2, line 31 - line 42 column 4, line 42 - line 62 column 5, line 58 - line 67 figures 2,13,16,17,19-21,33-35 ----	1,4,11, 15,16
A	US 2 387 745 A (COLBERT WILLIAM H ET AL) 30 October 1945 (1945-10-30) page 2, column 1, line 25 -column 2, line 30 figures 1-5,7-11,13,15-17,19 -----	1-3,17

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Internal Application No  
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4335421	A	15-06-1982	NONE
GB 2358513	A	25-07-2001	NONE
US 4267489	A	12-05-1981	JP 55133008 A 16-10-1980 JP 55082619 U 07-06-1980
US 5839823	A	24-11-1998	AT 209768 T 15-12-2001 CA 2250312 A1 02-10-1997 CN 1220002 A ,B 16-06-1999 DE 69708615 D1 10-01-2002 DE 69708615 T2 01-08-2002 DK 890060 T3 18-02-2002 EP 0890060 A1 13-01-1999 ES 2169374 T3 01-07-2002 JP 2000507736 T 20-06-2000 KR 2000005023 A 25-01-2000 PT 890060 T 29-04-2002 TW 419572 B 21-01-2001 WO 9736131 A1 02-10-1997
US 2387745	A	30-10-1945	NONE